

SYNAPS.

Designed to perform

Synaps

SYNAPS is a high-performance synthetic paper designed for print applications that demand durability. Tear-proof, weather-resistant, and made to last, it stands strong where other substrates fail. Despite its toughness, SYNAPS prints with stunning clarity—capturing vibrant colours and crisp details.

Printing companies love SYNAPS as it ensures seamless operation across a versatile range of printing technologies without compromising productivity.

**No matter the challenge,
SYNAPS performs.**



AGFA 

Why brands love SYNAPS

MADE TO BRAVE THE ELEMENTS

SYNAPS thrives where others fail. Its **UV and weather resistance** ensure flawless performance indoors and outdoors, with **virtually no discolouration or deterioration**. Whether facing scorching sun, heavy rain, or freezing cold, SYNAPS keeps your message sharp.

ENGINEERED FOR EXTREME DURABILITY

Tough environments demand tough materials. SYNAPS delivers **high tear and scratch resistance**, ensuring your prints remain intact even with heavy handling. Its **exceptional resistance to water, oil, and chemicals** makes it ideal for challenging applications, from industrial settings to outdoor signage.

ALWAYS IN GREAT SHAPE

Say goodbye to curling and warping. SYNAPS' stretch- and temperature-resistant, **dimensionally stable structure** ensures exceptional **flatness and rigidity**, keeping prints smooth, tight and perfectly aligned, even as conditions change.

PREMIUM FEEL, OUTSTANDING PRINT QUALITY

SYNAPS' opaque, refined surface offers a silky-soft luxury feel, making it ideal for high-end applications. Beyond its elegant touch, SYNAPS ensures **superior image quality and vibrant colours** time after time. The result is a striking combination of aesthetics and performance.

EFFORTLESS MAINTENANCE

SYNAPS' smooth, non-porous surface **wipes clean without affecting print quality**. It stays pristine even with frequent handling, ideal for high-touch environments like restaurants, retail, or travel. Durable and easy to maintain, SYNAPS is a reliable choice for demanding applications.

WRITABLE FOR ANY USE

Compatible with pencils, ballpoint pens, and markers, SYNAPS allows for **handwritten notes**—perfect for applications like scorebooks, loyalty cards, and industrial checklists. Whether for practical use or creative expression, SYNAPS combines high-quality printing with the flexibility of manual input.

"SYNAPS has proven to be the solution to some of our key challenges, cementing its value in our offering. It replaces lamination and enables the effortless production of high-quality durable print using various methods. It's highly versatile, with restaurant menus being a favorite application."

Erika Thomas,
Product Manager at Nekoosa, USA

performance that lasts

prints
like
paper

"Since using SYNAPS, we've eliminated the labour and cost of lamination while improving durability."

Japanese tyre retailer

Why printing companies love SYNAPS

STRAIGHT TO THE FINISH LINE

With SYNAPS, printing is all it takes—**no extra process steps**. Unlike laminated paper, SYNAPS requires no extra processing. Ready straight from the press, it saves time, costs, and resources.

EASY DROP-IN

SYNAPS requires **no special storage or handling conditions** and its no-grain structure ensures uniform **performance in any direction**, delivering smooth, high-quality prints across various printing technologies—**no pre-treatment** required. SYNAPS works seamlessly with **standard settings and inks**, ensuring **smooth paper transport, fast ink acceptance** and **quick drying**, while its antistatic top coating enhances **adhesion**. Unlike other synthetic papers, SYNAPS remains **dimensionally stable** even under high laser printer temperatures, ensuring flawless, warp-free recto-verso printing.

SIZED FOR ANY CHALLENGE

SYNAPS offers **versatility in shapes and sizes**. Whether in **sheets, rolls, or master rolls**, it provides the flexibility to handle **both small and large-scale printing tasks** with the same high level of quality and efficiency.

COMPATIBLE WITH ALMOST ANY PRINT TECHNOLOGY

SYNAPS is an incredibly versatile substrate that is suited for nearly every print technology, from traditional offset to flexo and a wide variety of digital printing technologies. This compatibility allows you to **meet a broader array of client needs**, which cannot be answered by any other single product.

Check out the compatibility table at the end of this brochure.

LIMITLESS PERSONALIZATION

SYNAPS is the perfect choice for **print-on-demand and in-plant print shops**, offering the flexibility to switch from paper to synthetics with full confidence. **Pre-printing in offset followed by digital personalization** enables you to deliver highly customized products.

MAXIMAL PROFITABILITY

SYNAPS' compatibility with digital printing technologies makes it **ideal for short-run jobs** and **filling capacity gaps**—**optimizing workload** and **expanding applications**. As this flexibility boosts your production efficiency, it will ultimately maximize your profitability.

Explore a world of possibilities



hospitality

SYNAPS offers the perfect balance of premium print quality and resilience, making it ideal for high-touch applications like **menu cards, hotel room doorhangers, business cards, membership or loyalty cards, and event entry passes**. Its tear-resistant, waterproof, and easy-to-clean properties ensure printed materials maintain their elegance, even in busy environments.



retail

SYNAPS is ideal for **shopping cart signage, wobblers, promo stickers, price tags, and shelf advertising**, maintaining vibrant prints despite frequent handling and moisture exposure. Its tear-resistant, waterproof, and UV-stable properties ensure longevity for both indoor and outdoor displays. Retailers can create signage and labels that withstand daily hustle with SYNAPS.



industry & agriculture

SYNAPS' tear resistance, waterproofing, and chemical resistance make it ideal for **plant labels, maintenance labels, safety labels, and hazard signs** that endure harsh environments. Whether marking safety information or providing plant care instructions, SYNAPS ensures clarity, legibility, and resilience in challenging conditions.



signage

SYNAPS delivers vivid colours, sharp details, and long-lasting performance for **3D billboards, posters, and banners**. Its tear-resistant, waterproof, and UV-stable properties ensure prints stay crisp, even in high-traffic or outdoor areas. Its rigidity and stability make it perfect for freestanding displays, maintaining shape and visual appeal over time.



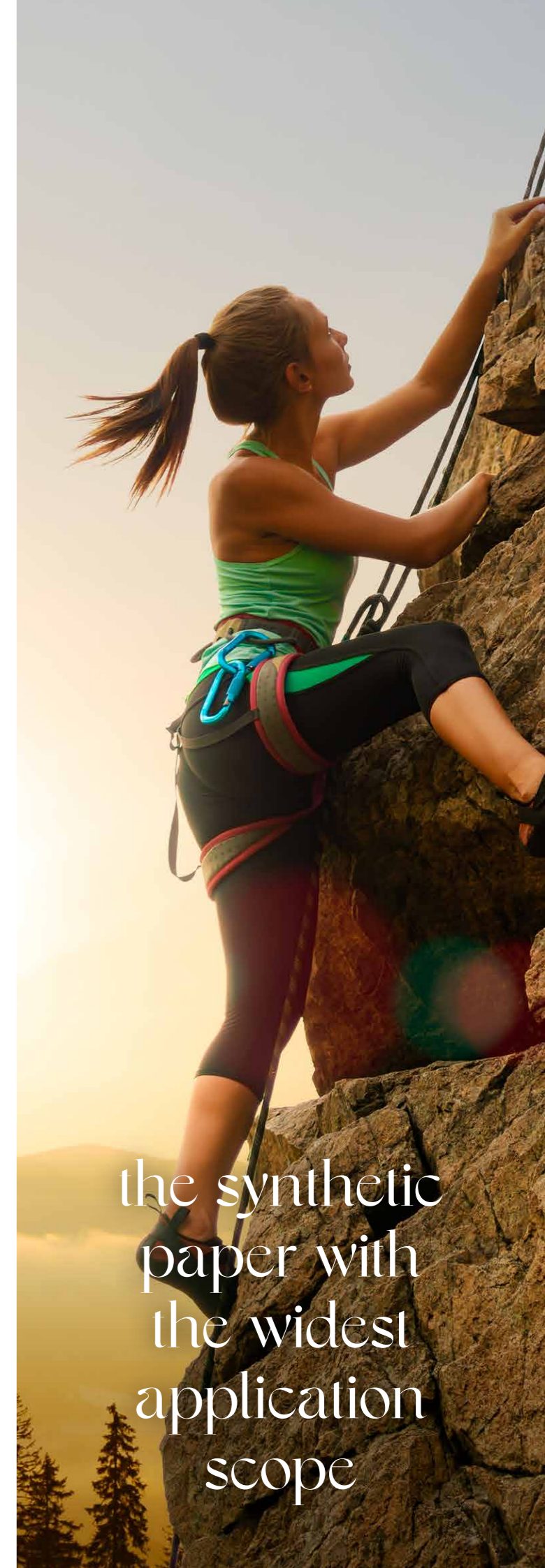
travel & transportation

In travel and transportation, materials need durability and clarity. SYNAPS is perfect for **timetables, safety cards, temporary license plates and luggage labels**, offering tear resistance, waterproofing, and UV stability. It withstands wear and tear, ensuring legibility and clear instructions throughout travel.



decoration & art & hobby

SYNAPS offers endless creative possibilities with its durability and exceptional print quality. Its rigidity and tear resistance make it ideal for decorative applications like **custom wall art, lamp shades, and vases**. The smooth surface is perfect for intricate **alcohol ink art** and experimenting with textures, while its grain-free surface and laser-cutting ability appeal to **modelers**. SYNAPS is also great for creating water-repellent **stencils** and durable, long-lasting games, with tear-proof and easy-to-clean properties that ensure longevity.



the synthetic paper with the widest application scope

durable solutions for every challenge

A wide range of types and weights

SYNAPS XM – XEROGRAPHIC MATT

For laser printers and copiers

Type	Weight (g/m ²)	Thickness (µm)	Thickness (mil)
XM110	110	100	4
XM135	135	120	5
XM170	170	150	6
XM230	230	200	8
XM300	300	250	10
XM375	375	300	12
XM450	450	350	14

SYNAPS OM – OFFSET MATT

For offset, HP Indigo and UV inkjet printing – available in sheets and rolls

Type	Weight (g/m ²)	Thickness (µm)	Thickness (mil)
OM135	135	120	5
OM170	170	150	6
OM230	230	200	8
OM300	300	250	10
OM450	450	350	14

SELF-ADHESIVE SYNAPS

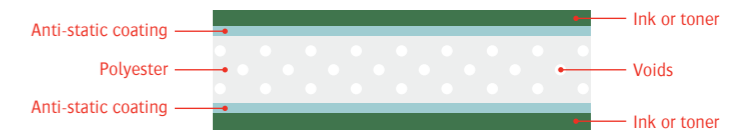
SYNAPS OM135 is also available in a self-adhesive variant, featuring an adhesive layer and a protective siliconized paper liner. There are two versions: a permanent (AP) and a repositionable (AR) one. Applications include indoor and outdoor POS signage, and stickers and labels in a variety of demanding environments. One of the key advantages of self-adhesive SYNAPS is its clean removal—stickers peel off in one piece, unlike other adhesive materials that tend to tear and require a time-consuming process of removing countless small fragments.

Type	Weight (g/m ²)	Thickness (µm)	Thickness (mil)
OM135 (AP & AR)	135	270	11



A deep dive into SYNAPS

SYNAPS is based on patented technology. It is made of a high-quality biaxially oriented polyester core, coated on both sides with an antistatic primer and an ink- or toner-receiving layer to ensure optimal print quality.



SYNAPS XM: PROTECTION AGAINST BACTERIA AND VIRUSES

SYNAPS XM features a built-in protective agent that prevents the growth of bacteria, viruses, and mould. Using silver ion technology, it disrupts harmful organisms without affecting the material's appearance or safety.

Tested and certified for its antibacterial and antiviral properties, SYNAPS XM offers enhanced protection for a cleaner, safer surface—making it ideal to use in healthcare environments.

SYNAPS XM



SYNAPS OM



SELF-ADHESIVE SYNAPS



PRINTER COMPATIBILITY

Type	OFFSET		FLEXO		SCREENPRINT		HP Indigo sheetfed	Dry toner	AccurioJet KM-1/Komori IS29	Canon Varioprint iX	Landa nanographic printing	Xeikon	Thermal transfer	LARGE-FORMAT INKJET	
	Conventional	UV	Water-based	UV	Solvent	UV								Latex	UV
XM		•		•		•		•							•
OM	•	•	•	•	•	•	•		•	•	•		•	•	•
OM AP/AR	•	•	•	•	•	•	•			•			•	•	•

Scan the QR codes

to consult printing recommendations, frequently asked questions, technical datasheets, and (for self-adhesive SYNAPS) the adhesion performance chart.

Certified by RecyClass

15 % RECYCLED PLASTIC

Committed to sustainability

SYNAPS is not only a high-performing product, but also supports a more sustainable future. By integrating recycling and reducing waste, we ensure that we continuously improve our environmental performance and minimize our impact on the planet.

PVC AND PLASTICIZER-FREE

SYNAPS is free from PVC and plasticizers, making it a safer and more environmentally friendly alternative to many other synthetic materials.

RECYCLING

We collect pre-consumer trimmings, resulting in over **15%** of all newly made SYNAPS consisting of rPET (recycled polyester) - a unique feature certified by the **independent RecyClass** cross-industry initiative that advances plastic products' recyclability and traceability. That way, we help reduce the demand for virgin polyester and contribute to a more circular economy.

Additionally, we can collect post-consumer waste to achieve a closed-loop system. This depends on specific conditions and can be discussed on a case-by-case basis.

SUSTAINABLE PRODUCTION

We conserve water by purifying and reusing it through a natural micro-biological process, reducing consumption and impact. Our production generates no chemical waste, and our commitment to sustainability is recognized by ISO 14001 certification.

Where to buy



Find your
nearest distributor

Powered by Agfa

With over 160 years of expertise in coating technology and over 40 years in printing technology, Agfa has perfected the interaction between print engines, inks, and paper. For over 15 years, Agfa has been designing and producing **SYNAPS in Belgium to the highest European quality standards.**

Agfa's expertise and its commitment to innovation blend with a robust distributor network and exceptional service to make SYNAPS the trusted choice for durable, high-performance printing.

www.agfa.com/synaps

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